

Serial No. 10/058,385
Amdt. dated October 14, 2003
Reply to Office Action of April 14, 2003

Docket No. MRE-0052

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

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1. (Currently Amended) ~~In a~~ A fan apparatus configured to be installed to in a chamber of a handler, ~~and a plurality of bearing housing installed to both ends of a case in which a shaft connected to a rotation central shaft of a rotation motor is installed therein,~~ the fan apparatus comprising:

a case;

a shaft configured to be connected to a central rotation shaft of a rotation motor,

wherein the shaft is installed in the case;

a plurality of bearing housings installed in the case, wherein at least one of the bearing housings comprises:

a first housing portion having a plurality of first guide recess ~~formed~~ recesses;

a second housing portion configured to be contained in the first housing portion and slidable therein;

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a bearing ~~being~~ installed inside the second housing portion and supporting
configured to support the shaft; and

a plurality of labyrinths ~~being~~ installed, respectively, at both sides of the
bearing and supporting configured to support the bearing; and

~~a push cover covering the second housing inserted into the first housing.~~

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2. (Currently Amended) The fan apparatus of claim 1, wherein the first housing
portion further comprises a grease inlet ~~capable of filling grease~~ configured to allow grease to
be supplied to the bearing housing, and a plug ~~for sealing~~ configured to seal the grease inlet are
~~combined with one side of the first housing.~~

3. (Currently Amended) The fan apparatus of claim 1, wherein ~~a~~ the plurality of first
guide recesses are formed ~~in the direction opposite to each other on the~~ on an inner
circumferential surface of the first housing portion.

4. (Currently Amended) The fan apparatus of claim ~~1~~ 2, wherein the second housing
portion ~~has the~~ comprises a plurality of second guide recesses formed on an outer
circumferential surface thereof ~~which are installed~~ of the second housing portion, and wherein
the plurality of second guide recesses are formed facing with the plurality of first guide recesses.

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5. (Currently Amended) The fan apparatus of claim 3 ~~4~~, wherein further comprising a plurality of keys ~~are~~ configured to be slidably inserted and mounted into the plurality of first guide recesses and the plurality of second guide recesses.

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6. (Currently Amended) The fan apparatus of claim 5, wherein the number of the keys installed ~~at~~ into the second guide recess and inserted into the first guide recess is the same as the number of second guide recesses and the number of first guide recesses respectively formed at the second housing portion and the first housing portion, respectively.

7. (New) The fan apparatus of claim 3, wherein the plurality of first guide recesses are formed opposite each other.

8. (New) The fan apparatus of claim 3, wherein the plurality of first guide recesses are formed extending in a longitudinal direction on an inner surface of the first housing portion.

9. (New) The fan apparatus of claim 4, wherein the plurality of second guide recesses are formed in a longitudinal direction on an outer surface of the of the second housing portion.

10. (New) The fan apparatus of claim 1, further comprising a push cover configured to cover the second housing portion when the second housing portion is inserted into the first housing portion.

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cont 11. (New) The fan apparatus of claim 1, wherein the second housing portion is further configured to slide in a longitudinal direction within the first housing portion in response to a force applied by the shaft.

12. (New) A fan apparatus configured to be installed in a chamber of a handler, comprising:

a case;

a shaft configured to be connected to a central rotation shaft of a rotation motor, the shaft installed in the case;

a plurality of bearing housings installed at ends of the case, wherein at least one of the bearing housings comprises:

a first housing portion,

a second housing portion configured to be slidably joined to the first housing portion, and

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a bearing installed inside the second housing portion and configured to support the shaft.

13. (New) The fan apparatus of claim 12, wherein the first housing portion further comprises at least one first guide recess.

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14. (New) The fan apparatus of claim 13, wherein the at least one first guide recess extends in a longitudinal direction along an inner surface of the first housing portion.

15. (New) The fan apparatus of claim 13, wherein the second housing portion further comprises at least one second guide recess.

16. (New) The fan apparatus of claim 15, wherein the at least one second guide recess extends in a longitudinal direction along an outer surface of the second housing portion.

17. (New) The fan apparatus of claim 15, wherein the at least one first guide recess and the at least one second guide recess face each other when the second housing portion is joined to the first housing portion.

18. (New) The fan apparatus of claim 15, wherein the number of first guide recesses is equal to the number of second guide recesses.

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19. (New) The fan apparatus of claim 15, further comprising at least one key configured to be inserted into the at least one second guide recess and the at least one first guide recess.

20. (New) The fan apparatus of claim 19, wherein the number of keys is the same as the number of first guide recesses or the number of second guide recesses.

21. (New) The fan apparatus of claim 12, further comprising at least one labyrinth installed in the second housing portion and configured to hold the bearing.

22. (New) The fan apparatus of claim 12, further comprising a push cover configured to cover the second housing portion when the second housing portion is joined to the first housing portion.

23. (New) The fan apparatus of claim 12, wherein the first housing portion further comprises a grease inlet configured to allow grease to be supplied to an inner portion of the first housing portion, and a plug configured to seal the grease inlet.

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24. (New) A dual structure bearing housing assembly, comprising:
a first housing portion;
a second housing portion configured to be slidably joined to the first housing portion and configured to receive a bearing; and
at least one key configured to couple the first housing portion and the second housing portion.

25. (New) The bearing housing assembly of claim 24, wherein the first housing portion further comprises at least one first guide recess formed in a longitudinal direction along an inner surface of the first housing portion.

26. (New) The bearing housing assembly of claim 25, wherein the second housing portion further comprises at least one second guide recess formed in a longitudinal direction along an outer surface of the second housing portion.

27. (New) The bearing housing assembly of claim 26, wherein the number of first guide recesses and the number of second guide recesses is the same, and wherein each first guide recess faces a corresponding second guide recess.

28. (New) The bearing housing assembly of claim 26, wherein at least one key is configured to be mounted in one of the first and second guide recesses, and slidably inserted into the other of the first and second guide recesses.

29. (New) The housing of claim 24, wherein the second housing portion is further configured to slide in the longitudinal direction within the first housing portion in response to a longitudinal force applied to the second housing portion.
